



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,180	08/21/2006	Bernd Biallas	PAT-01174	1966
77234	7590	02/17/2009	EXAMINER	
Mary E. Golota Cantor Colburn LLP 201 W. Big Beaver Road Suite 1101 Troy, MI 48084			SCHIRO, RYAN RAYMOND	
			ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
			02/17/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MARJORIE.ELLIS@BASF.COM
Mgolota@CantorColburn.com
usptopatmail@cantorcolburn.com

Office Action Summary

Application No.

10/598,180

Applicant(s)

BIALLAS ET AL.

Examiner

RYAN SCHIRO

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 08/21/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 1-24 are pending and presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-8 and 10-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hintze-Bruning et al. (US 2004/0175572) in view of Fujii et al. (US 5011881).

Hintze-Bruning teaches a method for making a single-layer or multilayer color or effect film preparable by continuously applying a component amount of at least one basecoat material by means of directed application technique to a carrier, applying another layer of the same or a different basecoat by at least one application technique and drying or partly or fully curing the resulting layers, as required by claims 1, 10, 11, 13, 14 and 16 (0022-0025). The films of the invention can be used for coating of substrates, as required by claim 17 (0001). Hintze-Bruning

mentions that the preferred multilayer film is stretchable for forming a coating over three dimensional objections without significant change in color or effect, as required by claim 19 (0018). The film of the invention may also include a clearcoat that can be cured thermally, which is the same as heating, or with actinic radiation, as required by claims 1 and 2 (0120—0121). The film can be used for automotive substrates, as required by claim 20 (0107). The carrier may be permanent or temporary (0065). A permanent carrier is preferably a polymer material and can comprise clear coat films, adhesion films or comparatively thick thermoformable carrier films, as required by claim 15 (0070).

Hintze-Bruning does not teach the specifically adjusting the temperature of the basecoat film before applying the clearcoat, specific residual volatile contents of the basecoat and clearcoat and specific drying rates, as required by claims 1-8 and 21-24.

Fujii teaches a two coat coating method for coating a substrate comprising the steps of coating with a basecoat composition containing coloring pigment, applying a clearcoat to the cured or uncured coating and curing the clearcoat or the two coatings at the same time at a temperature of lower than about 120 degrees Celsius, as required by claim 1 (abstract). The aqueous coating composition is dried in air or hot air until the water content of the coating is reduced to about 25% by weight of water or lower, as required by claims 1, 2, 5, 7, 21 and 22 (col. 7, lines 14-27). A test piece was coated twice and allowed to stand for two minutes, dried in air at a temperature of 80 degrees C for 10 minutes and cooled to room temperature until a volatile content of about 20% in the coating was reached, as required by claims 1-6 and 21-22 (col. 10 and 11, lines 66-2). The clear coat composition was then coated onto the coated test

piece and dried and cured at 80-90 degrees C for 30 minutes, as required by claims 7, 8, 23 and 24 (col. 11, lines 1-8).

It would have been obvious to a person ordinarily skilled in the art at the time of the invention to heat the basecoat and clearcoat films to adjust the volatiles content to 3-10% by weight, to employ the average drying rates of 1-40% by weight/minute and to adjust the temperature to 50-35 degrees Celsius, as required by claims 1, 3, 5, 7 and 21-24. One would have been motivated to employ the drying percentages and average drying rates required because Hintze-Bruning and Fujii teach drying of both the basecoat and clearcoat at various temperatures in the same ranges as provided in the applicant's specification. Since the drying temperature is one parameter that can be changed for various embodiments of the inventions and directly affect the volatile contents weight percentage and the drying rate, the volatile contents weight percent of the dried film and drying rates are considered to be cause effective variables. It is well settled that the determination of optimum values of cause effective variables such as the volatile contents weight percentage of the dried films and drying rates is within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

It would have been obvious to a person ordinarily skilled in the art at the time of the invention to cool the basecoat and clearcoat films to a temperature to 50-35 degrees Celsius, as required by claims 1, 4, 6 and 8. One would have been motivated to adjust the basecoat temperature to 35-50 degrees Celsius because Fujii teaches that the basecoat is to be cooled to room temperature, which is understood to be about 30 degrees Celsius. One would have been motivated to adjust the clearcoat temperature after coating to less than 50 degrees Celsius

because Fujii teaches letting the coating cool in a chamber at a temperature of -30 degrees Celsius in a preferred example, which is well below the required temperature.

The continuous clearcoating method is not taught by Hintze-Bruning in view of Fujii, as required by claim 12. Also, curing the multilayer sheets after joining with the substrates by thermal curing, as required by claim 18, is not taught.

It would have been obvious to a person ordinarily skilled in the art at the time of the invention to use a continuous method of clearcoating with the process for producing a multilayer sheet taught by Hintze-Bruning in view of Fujii, as required by claim 12. One would have been motivated to make this modification because it is within the level of ordinary skill to operate a process continuously. *In re Dilnot*, 138 USPQ 48 (CCPA 1963).

It would have been obvious to a person ordinarily skilled in the art at the time of the invention to modify the process for producing a multilayer sheet taught by Hintze-Bruning in view of Fujii to include curing the multilayer sheet after joining with a substrate, as required by claim 18. One would have been motivated to make this modification because the transposition of process steps, where the processes are substantially identical or equivalent in terms of function, manner and result, was held to not patentably distinguish the processes. *Ex parte Rubin*, 128 USPQ 159 (PO BdPatApp 1959).

The protective coating film is not taught by Hintze-Bruning in view of Fujii, as required by claim 9.

Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hintze-Bruning in view of Fujii further in view of Steininger et al. (US 2004/0208998).

Steininger teaches a film made by 2 paint coats which can be cured (abstract). The film can have a reinforcing sheet on one side with adhesive predisposed on it and a carrier film of polypropylene over the clear coat film, as required by claim 9 (0087, Figure 2). The carrier film can insure protection of the paint surfaces until the end product has been produced (0080).

It would have been obvious to a person ordinarily skilled in the art at the time of the invention to modify the process for producing a multilayer sheet taught by Hintze-Bruning in view of Fujii with the polypropylene film over the clear coat taught by Steininger, as required by claim 9. One would have been motivated to make this modification because Hintze-Bruning and Steininger teach similar films for use in coating motor vehicles that are stretchable teaches and Steininger specifically teaches that the improved film can significantly reduce factory standing times and eco-friendliness.

Conclusion

Claims 1-24 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Schiro whose telephone number is 571-270-5345. The examiner can normally be reached on Monday-Friday from 8:30 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached at 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ryan Schiro
Art unit 1792

/Michael Barr/
Supervisory Patent Examiner, Art Unit 1792